

The Confederated Tribes of Warm Springs



Water Quality Monitoring Program

Warm Springs Community Water System

PWS ID# 104101247



Updated April 2019



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Appendices containing additional information about your water quality monitoring program, water quality parameters, record keeping, sampling procedures, public notices of violation and evaluating testing results are located in the appendices to this document, titled “Appendices for Water Quality Management Plans”.

1.0 MONITORING PLAN SUMMARY

<i>See your most recent Monitoring and Compliance Schedule for sample frequency, number of samples and next sample due dates</i>		
Contaminant Name (Analyte)	Sample Site IDs	Additional Instructions
Total Coliform Samples		
Coliform (40 CFR § 141.855)	WS-04, WS-07, WS-10, WS-13, WS-14, WS-16, WS-19, WS-22, WS-25, WS-28, WS-30, WS-32, WS-35	See schedule in Table 2 Record chlorine residual on lab slip
Distribution Sampling		
Disinfection Byproducts (DBPs)		
TTHM <u>and</u> HAA5 (40 CFR § 141 Subpart V)	WS-10 and WS-42	Sample only in the months designated in your Monitoring & Compliance Schedule
Lead & Copper		
Lead & Copper (40 CFR § 141.80-91)	WS-10, WS-23, WS-28, WS-31, WS-37, WS-38.1, WS-39, WS-40, WS-41, WS-42 (use bathroom sink tap), WS-05, WS-15, WS-47, WS-25, WS-49, WS-50, WS-51, WS-52, WS-54, WS-56	Sample at designated sites only*
Asbestos		
Asbestos	WS-19	
Entry Point Sampling		
Nitrate (40 CFR § 141.23)	WS-02	Sample finished tap after treatment
IOCs (40 CFR § 141.23)	WS-02	Sample finished tap after treatment <i>See Federal Analyte List</i>
SOCs (40 CFR § 141.24)	WS-02	Sample finished tap after treatment <i>See Federal Analyte List</i>
Radionuclides: Gross Alpha <u>and</u> Radium-228 (40 CFR § 141.26)	WS-02	Sample finished tap after treatment
VOCs (40 CFR § 141.24)	WS-02	Sample finished tap after treatment

		<i>See Federal Analyte List</i>
Alkalinity	WS-01	Sample raw tap at the same time as TOC
TOC	WS-01 and WS-02	One sample at raw tap and one sample at finished tap at the same time as alkalinity
Entry Point Sampling		
Chlorine	WS-02 (WS-02.1 see below)	Continuously
IFE Turbidity	WS-43, WS-44, WS-45, and WS-46	Continuously Data logged at 15-minute intervals
CFE Turbidity	WS-02 (WS-02.1 will be used when the new sample site is established inside of pump room)	Continuously Data logged at 15-minute intervals Data reported on MOR at 4-hour intervals
Consumer Right to Know: Consumer Confidence Report (CCR)		
CCR (40 CFR §141 Subpart O)	Distribute to customers every year by July 1 st , certify and send to EPA	Discloses water quality from previous calendar year***

Table 1- Monitoring Plan Summary

*If you are no longer able to collect a lead and copper sample from a site identified in the Monitoring Plan Summary, contact your TUC and EPA before using alternate sites.

Remember to issue a Lead Consumer Notice to each household where lead was sampled or post this notice in public areas. You must submit a sample of the notice, along with certification that it was distributed to the EPA, or you will be issued a violation.

IOC/VOC/SOC Sampling Note: EPA sampling requirements for IOC, VOC, and SOC are based on the Federal Analyte Lists provided in the Appendix. Supply these to the laboratory, since States do not always meet EPA requirements.

***For example, the CCR distributed by July 1, 2018 discloses water quality from January 1 – December 31, 2017 to your customers.

2.0 WAIVER LETTER(S)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 500
Seattle, WA 98101-3140

OFFICE OF
WATER AND WATERSHEDS

July 11, 2014

Steve Courtney Sr.
Chief Operator
Warm Springs Utilities Dept.
PO Box 1196
Warm Springs OR 97761

Re: Tribal Drinking Water Waiver Program Approval letter for
PWS- Warm Springs Water Treatment Plant PWSID# 104101247

Dear Mr. Courtney:

EPA is contacting you with this letter to let you know that waivers for the following contaminant groups have been approved for the Warm Springs Water Treatment Plant water system.

IOC including arsenic – remember – no waiver for nitrate
VOC
SOC

It is important to note that for a surface water system the duration of the IOC waiver differs from the duration for the VOC and SOC contaminant groups and **one round of sampling during the waiver period will be required for the IOC contaminant group**. However, since you collected IOC samples in 2012, you have completed your IOC monitoring for this waiver period and will not need to collect IOC samples until the next waiver period. These waivers are not intended to be forever. You will need to reapply for waivers for each of these contaminant groups in the future. Please see the table below for information on the duration of each waiver, the associated monitoring requirements, if any, and when you will need to reapply for each waiver.

Contaminant Group	Duration of Waiver	Waiver Period	Collect One Round of Samples During	When to Reapply for Next Waiver	Next Waiver Period
IOC	9 years	2011 - 2019	No samples required	January 2018	2020 - 2028
VOC	3 years	2014 - 2016	No samples required	January 2015	2017 - 2019
SOC	3 years	2014 - 2016	No samples required	January 2015	2017 - 2019

Reapplication forms for all contaminant groups are enclosed. You can also contact us at any time to send you a new reapplication form.

Sincerely,

Lisa Jacobsen
Tribal Drinking Water Coordinator

Enclosure
cc: Ladd Folster - IHS





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
WATER AND WATERSHEDS

| May 30, 2017

Steve Courtney Sr.
Chief Operator
Warm Springs Utilities Dept.
PO Box 1196
Warm Springs OR 97761

Re: Tribal Drinking Water Waiver Approval for Warm Springs, PWS ID 104101247

Dear Mr. Courtney:

EPA is contacting you with this letter to let you know that renewal of waivers for the SOC contaminant group has been approved for your system noted above. This letter also summarizes the status of your waivers and supersedes all previous Tribal Drinking Water Waiver letters.

It is important to note that the duration of the waiver is different for each contaminant group and **one round of sampling during the waiver period will be required for the IOC and VOC contaminant groups**. However, since you collected IOC samples in 2012, you have completed your IOC monitoring for this waiver period and will not need to collect IOC samples until the next waiver period.

You will need to reapply for waivers for each of these contaminant groups in the future. Please see the table below for information on the duration of each waiver, the associated monitoring requirements, if any, and when you will need to reapply for each waiver.

Contaminant Group	Duration of Waiver	Waiver Period	Collect One Round of Samples During	When to Reapply for Next Waiver	Next Waiver Period
IOC	9 years	2011 - 2019	Sampled in 2012	January 2019	2020 - 2028
VOC	6 years	2014 - 2019	2017	January 2019	2020 - 2025
SOC	3 years	2017 - 2019	No samples required	January 2019	2010 - 2022

If you have questions, please contact Gene Taylor at (206) 553-0251 or taylor.gene@epa.gov, or Jenna Manheimer at (206) 553-1189 or Manheimer.Jennifer@epa.gov.

Sincerely,

Jenna Manheimer
Tribal Drinking Water Coordinator

cc: Ladd Folster - IHS

3.0 COLIFORM MONITORING REQUIREMENTS

Four (4) total coliform (TC) bacteria samples must be collected **each month** from the sample sites below. The operator should sample early in the month, as well as early in the week, to allow for re-sampling.

NOTE: Chlorine residual must be measured and reported on the lab slip submitted to EPA.

Rotating Routine Sample Sites The following are approved monthly **routine** coliform sample sites:

Site	Week	Month
WS-04	1	January
WS-13	2	January
WS-07	3	January
WS-19	4	January
WS-10	1	February
WS-22	2	February
WS-16	3	February
WS-25	4	February
WS-13	1	March
WS-28	2	March
WS-14	3	March
WS-32	4	March
WS-22	1	April
WS-35	2	April
WS-25	3	April
WS-30	4	April
WS-04	1	May
WS-13	2	May
WS-07	3	May
WS-19	4	May
WS-10	1	June
WS-22	2	June
WS-16	3	June
WS-25	4	June
WS-13	1	July
WS-28	2	July
WS-14	3	July
WS-32	4	July
WS-22	1	August
WS-35	2	August
WS-25	3	August
WS-30	4	August
WS-04	1	September
WS-13	2	September
WS-07	3	September

WS-19	4	September
WS-10	1	October
WS-22	2	October
WS-16	3	October
WS-25	4	October
WS-13	1	November
WS-28	2	November
WS-14	3	November
WS-32	4	November
WS-22	1	December
WS-35	2	December
WS-25	3	December
WS-30	4	December

Table 2-Rotating Coliform Sampling Sites

Repeat Coliform Sample Sites: The following sites are for repeat sampling in the case of a TC+

WS-04:	Upstream:	WS-03
	Downstream:	WS-05
WS-07:	Upstream:	WS-06
	Downstream:	WS-08
WS-10	Upstream:	WS-09
	Downstream:	WS-11
WS-13	Upstream:	WS-12
	Downstream:	WS-14
WS-14	Upstream:	WS-13
	Downstream:	WS-15
WS-16	Upstream:	WS-15
	Downstream:	WS-17
WS-19	Upstream:	WS-18
	Downstream:	WS-20
WS-22	Upstream:	WS-21
	Downstream:	WS-23
WS-25	Upstream:	WS-24
	Downstream:	WS-26
WS-28	Upstream:	WS-27
	Downstream:	WS-29
WS-30	Upstream:	WS-19
	Downstream:	WS-22

WS-32	Upstream:	WS-31
	Downstream:	WS-33
WS-35	Upstream:	WS-34
	Downstream:	WS-36

Table 3-Repeat Coliform Sample Sites

NOTE: If a monthly routine total coliform bacteria sample is positive, you must collect **three** follow-up coliform samples **within 24 hours** of being notified of the positive result:

- One repeat sample from the same tap as positive result.
- One repeat sample upstream.
- One repeat sample downstream.

If any two or more samples are total coliform positive, you are required to complete a **Level 1 assessment** within 30 days.

You are encouraged to collect extra samples the month following a TC+ result.

4.0 SURFACE WATER REPORTING FORMS

SURFACE WATER TREATMENT RULES MONTHLY REPORTING FORM FOR COMBINED FILTER EFFLUENT (CFE) TURBIDITY (Due to EPA by 10th day of the following month)

Month _____ Year _____ PWS ID# 104101247 Water System Name: Warm Springs Water Treatment Plant

CFE TURBIDITY MUST BE REPORTED EVERY 4 HOURS. FILL IN THE TIME CFE TURBIDITY IS MEASURED IN THE TABLE BELOW

IF PLANT IS OFF AT THE TIME OF THE REQUIRED 4-HOUR READING, INDICATE "PO" IN THE APPROPRIATE BOX

**** THE DAILY MAXIMUM TURBIDITY VALUE REPORTED IN THE LAST COLUMN OF THE TABLE BELOW, FOR A PARTICULAR DATE, SHOULD BE THE HIGHEST OF THE TURBIDITY VALUES REPORTED ON THIS PAGE FOR THAT PARTICULAR DATE**

DO NOT REPORT RESULTS COLLECTED DURING BACKWASH, FILTER-TO-WASTE, OR ANY TIME WATER IS NOT BEING PRODUCED FOR CONSUMPTION

**** IF THE MAXIMUM TURBIDITY LEVEL EXCEEDS 1.49 NTU ON ANY DAY, CONTACT LISA JACOBSEN (EPA) AT (206) 553-6917 AS SOON AS POSSIBLE BUT NO LATER THAN 24 HOURS AFTER THE EXCEEDANCE**

Date	Time -	Time -	Time -	Time -	Time -	Time -	**DAILY Max NTU
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

A. Total number of reported Combined Filter Effluent (CFE) turbidity measurements = _____

B. Total Number of reported CFE turbidity measurements that are less than or equal to 0.3 NTU = _____

C. DATE OF LAST CALIBRATION OF CFE TURBIDIMETER: _____

Operator Signature _____

Date Submitted _____

SURFACE WATER TREATMENT RULES MONTHLY COMPLIANCE DETERMINATION REPORT

(Due to EPA by 10th day of the following month)

Month _____ System Name - Warm Springs Water Treatment Plant PWS ID 104101247
 Year _____ Type of Filtration - Conventional

Combined Filter Effluent Turbidity Performance Criteria

- A. Total number of Combined Filter Effluent (CFE) turbidity measurements (from page 1) = _____
 B. Total Number of CFE turbidity measurements that are less than or equal to 0.3 NTU (from page 1) = _____
 C. The percentage of CFE turbidity measurements meeting 0.3 NTU = $B / A * 100 =$ _____ %
 D. Is number in C less than 95%? ☐ yes ☐ No
 E. Record the date and turbidity value for any CFE measurements exceeding 1.49 NTU below. If none, enter "none":

Note: A system is in violation if the answer to "D" is "yes".

Time and Date of Exceedance	Turbidity (NTU) value(s) > 1.49	Time and Date EPA Was Notified

Disinfection Performance Criteria

A. Point-of-Entry (POE) Minimum Disinfectant Residual Criteria

The minimum residual concentration, measured as free chlorine must not drop below 0.2 mg/L (or a higher value if advised by EPA) for adequate inactivation of Giardia and viruses.

Date	Minimum Disinfectant Residual at Point of Entry to Distribution System (mg/L)	Date	Minimum Disinfectant Residual at Point of Entry to Distribution System (mg/L)	Date	Minimum Disinfectant Residual at Point of Entry to Distribution System (mg/L)
1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	
31					

Days where the POE Residual was less than 0.2 mg/L		
Time/Day	Duration of Low Level (indicate hrs)	Time and Date Reported to EPA

B. Distribution System Disinfectant Residual Criteria MEASURED WHEN TAKING TOTAL COLIFORM SAMPLES

A = # of times during the month a disinfectant residual measurement was taken in the distribution system = _____
 C = # of distribution system samples this month that disinfectant residual was NOT detected = _____
 $V = C / A * 100 =$ _____ % For the previous month, $V =$ _____ %

Note: A system is in violation if the residual disinfectant concentration is undetectable in more than 5 percent of the samples each month, for any two consecutive months that the system serves water to the public

Operator Initials _____

Date _____

INDIVIDUAL FILTER EFFLUENT (IFE) MONITORING REPORT

(Due to EPA by 10th day of the following month)

Summary of Individual Filter Effluent Monitoring Results for _____ (month/year)

1. Was continuous monitoring of the Individual Filter Effluent (IFE) turbidity conducted during the month?

No ☐ Yes ☐

2. Was the IFE turbidity recorded at least every 15 minutes?¹

No ☐ Yes ☐

3. Was there a failure of the IFE's continuous monitoring equipment?²

No ☐ Yes ☐

4. Was the IFE turbidity for any filter greater than 1.0 NTU in two consecutive 15 minute readings?

No ☐ Yes ☐

If yes, submit the Turbidity Exceedance Report Form (page 4) with this monthly report.

5. Was the IFE turbidity for the same filter greater than 1.0 NTU in 2 consecutive 15 minute readings during the past 3 consecutive months?³

No ☐ Yes ☐

If yes, call Lisa Jacobsen at (206) 553-6917 for Filter Self-Assessment instructions

If yes, enter date Individual Filter Self-Assessment was triggered:

If yes, enter date Individual Filter Self-Assessment was completed:

6. Was the IFE turbidity of the same individual filter greater than 2.0 NTUs in 2 consecutive 15 minute readings during the past 2 consecutive months?

No ☐ Yes ☐

If yes, call Lisa Jacobsen at (206) 553-6917 to arrange for a Comprehensive Performance Evaluation and answer question #7

7. If the answer to #6 above is "Yes", a Comprehensive Performance Evaluation (CPE) must be arranged within 60 days and it must be completed within 120 days of the CPE trigger. Has CPE been arranged?

No ☐ Yes ☐

Indicate the date the CPE was triggered:

Indicate the scheduled CPE date:

¹Individual Filter Effluent continuous monitoring results do not need to be submitted to EPA each month. The 15 minute recordings must be kept on-site for 3 years and available during site visits and sanitary surveys.

²If there is a failure of the continuous monitoring equipment, systems may take grab samples of the IFE turbidity every four hours in lieu of continuous monitoring. Failure to resume continuous monitoring of IFE turbidity within 14 days is a treatment technique violation.

³Filter Self Assessment reports must be kept on-site for 3 years.

Operator Initials _____

Date _____

Did any filter exceed 1.0 NTU in 2 consecutive 15 minute readings? Yes _____ No _____ If "Yes" - complete the rest of this form. If "No" - no additional information for this form is required, but form must still be submitted. Form is due to EPA by 10th day of the following month.

Filter Problems

- [illegible]

- Incorrect Calibration
- Air Bubble
- Debris
- Backwash Artifact

Coagulant
Coagulant Aid
Filter Aid

Raw Water Turbidity Unusually High

Did the same filter have an exceedance last month?

(If more than one exceedance occurred during the month, include filter #, date and time with each comment.)

[illegible]

Operator Initials _____ Date _____

5.0 SAMPLE SITE IDENTIFICATION

The following SDWA sample sites have been established:

Site #	Site	Notes
WS-00	Raw water Intake	For LT2 Sampling, alkalinity, raw TOC and any other source investigation
WS-01	Raw water sample tap, Treatment Plant intake.	Provides good representation of raw untreated water.
WS-02	Finished water sample tap, Treatment Plant Combined Filter Effluent (CFE) \$ feed for the CL-17 Chlorine Analyzer.	Provides good representation of treated water. All required finished water sampling collected here (IOCs, VOCs, Radionuclides, etc.)
WS-02.1	WS-02.1 will be used when the new sample site is established inside of pump room and WS-02 will be deactivated.	Provides good representation of treated water. All required finished water sampling collected here (IOCs, VOCs, Radionuclides, etc.)
WS-03	Ex. 6 Personal Privacy (PP)	Provides good representation of Sunnyside housing. Identified as disinfection monitoring point early in the distribution system
WS-04		Good representation of Sunnyside housing and first customers from Tee-Wees reservoir
WS-05		Good representation of Sunnyside housing and first customers from Tee-Wees reservoir Lead & copper Site
WS-06		Good representation of Wolfe Point area housing
WS-07		Good representation of Wolfe Point area housing
WS-08		Good representation of Wolfe Point area housing
WS-09	Kah-Nee-Tah Village Pool bath house	Good representation of Village facilities and campground area
WS-10	Kah-Nee-Tah Village, Maintenance Shop (old SP-4 and LC-1)	Good representation of Village facilities and campground area. Lead & copper sampling site due to limited residences in this area TTHM & HAA5 site
WS-11	Kah-Nee-Tah Village, RV Camp ground tap	Good representation of Village facilities and campground area
WS-12	Indian Head Casino, snack bar Kah-Nee-Tah Lodge	Good representation of Casino/ Lodge area and water to/from Kah-Nee-Tah reservoirs
WS-13	Kah-Nee-Tah Lodge, men's rest room (old SP-3)	Good representation of Casino/ Lodge area and water to/from Kah-Nee-Tah reservoirs
WS-14	Kah-Nee-Tah Employee Housing area Maintenance building	Good representation of Casino/ Lodge area and water to/from Kah-Nee-Tah reservoirs

WS-15	Ex. 6 Personal Privacy (PP)	Good representation of Upper Dry Creek Housing and Industrial Park Lead & Copper Site
WS-16		Good representation of Upper Dry Creek Housing and Industrial Park
WS-17		Good representation of Upper Dry Creek Housing and Industrial Park
WS-18	Elementary School, boy's RR, Wasco Street	Good representation of Agency Campus area
WS-19	1141 Warm Springs St Presbyterian Church (old SP-1)	Good representation of Agency Campus area Asbestos sampling site
WS-20	2112 Wasco Street Fire Hall	Good representation of Agency Campus area
WS-21	Tribal Administration Building 1233 Veterans St. Warm Springs, OR 97761	Good representation of Warms Spring Community Central area
WS-22	1270 Kotnum Rd IHS Clinic (old SP-2)	Good representation of Warms Spring Community Central area
WS-23	1370-B Elk Loop Tenino Duplex (old SP-12)	Good representation of Warms Spring Community Central area Lead & Copper sampling site due to limited single family residences in the area; Tier 1 multifamily building built in the 1980s
WS-24	Ex. 6 Personal Privacy (PP)	Good representation of West Hills reservoirs and residential area
WS-25		Good representation of West Hills reservoirs and residential area Lead & copper sampling site
WS-26		Good representation of West Hills reservoirs and residential area
WS-27		Good representation of SE reservoirs and residential areas
WS-28		Good representation of SE reservoirs and Greeley Heights residential areas Lead & copper sampling site
WS-29		Accessibility. Provides good representation SE reservoirs and residential areas
WS-30	2251 Rehab Street Public Works Office	Good representation of Warms Spring Community Central area
WS-31	Ex. 6 Personal Privacy (PP)	Good representation of Warms Spring Community residences North of Highway 26 Lead & copper sampling site
WS-32		Good representation of Warms Spring Community residences North of Highway 26
WS-33		Good representation of Warms Spring Community residences North of Highway 26
WS-34	Indian Trail Restaurant 3240 Highway 2 Warm Springs, OR 97761	Representation of facilities along lower Shite Creek
WS-35	Warm Spring Forest Product HR Office 3270 US-26 Warm Springs, OR 97761	Representation of facilities along lower Shite Creek
WS-36	Deschutes Crossing Restaurant 2198 N Highway 26 Warm Springs, OR 97761	Representation of facilities along lower Shite Creek
WS-37	Ex. 6 Personal Privacy (PP)	Representation of Warms Springs housing North of Highway 26 Lead & copper sampling site.
WS-38	Museum Drinking Fountain (old LC-5)	Inactive sampling site.

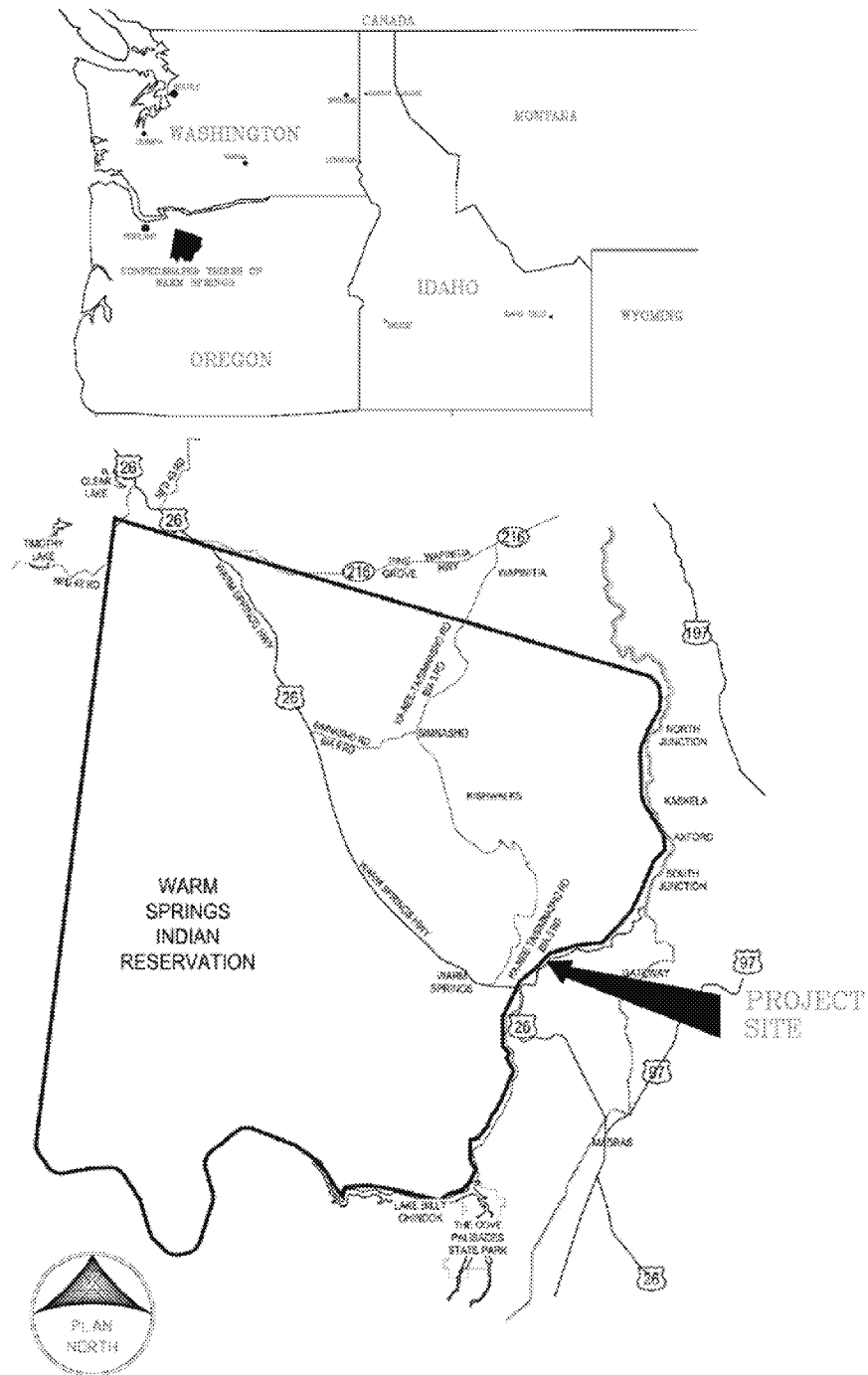
WS-38.1	Museum Kitchen Faucet 2189 US Highway 26	Lead & copper sampling site on east side of community along Highway 26; Limited sample sites in this area
WS-39	Ex. 6 Personal Privacy (PP)	Lead & Copper sampling site in Wolfe Point area
WS-40		Lead & copper sampling site in Upper Dry Creek area
WS-41		Lead & copper sampling site in Sunnyside area
WS-42		Lead & copper sampling site in Tenino Rd area; Use bathroom sink tap as sample site
WS-43		Provides information on the treatment provided by this filter
WS-44	Finished water from Filter #2 IFE Filter 2	Provides information on the treatment provided by this filter
WS-45	Finished water from filter #3 IFE Filter 3	Provides information on the treatment provided by this filter
WS-46	Finished water from filter #4 IFE Filter 4	Provides information on the treatment provided by this filter
WS-47	Ex. 6 Personal Privacy (PP)	Lead & copper sampling site
WS-48		
WS-49		Lead & copper sampling site
WS-50		Lead & copper sampling site
WS-51		Lead & copper sampling site
WS-52		Lead & copper sampling site
WS-53	4202 Holiday St. Construction Building	Inactive lead & copper sampling site
WS-54	Ex. 6 Personal Privacy (PP)	Lead & copper sampling site
WS-55	1257 Kotanum Early Childhood Center	Inactive lead & copper site
WS-56	Ex. 6 Personal Privacy (PP)	Lead & copper sampling site

Table 4-Sample Site Identification

Coliform and Lead and Copper Sampling Notes:

1. When sampling from a single control faucet for coliform bacteria or lead and copper, the hot water valve should be closed so the sample is cold water only. Automatic motion sensor faucets and swivel type valves should not be used as sample sites.
2. When sampling for coliform, the faucet aerator should be removed, and the fixture flushed and disinfected before sampling. Flushing time must be estimated to allow water from the main to be sampled.
3. When sampling for lead and copper, the faucet aerator should be left in place. **DO NOT** flush the fixture before sampling – collect first draw after water has been stagnant in pipes a minimum of 6 hours. Samples should be collected from the cold-water tap of the kitchen sink.

6.0 SAMPLE SITE MAPS



Ex. 6 Personal Privacy (PP)

Image courtesy of the U.S. Geological Survey
© 2004 Microsoft Corporation.

The Confederated Tribes of the Warm Springs Reservation
Warm Springs Area
Sample Sites - 3/25/05

Ex. 6 Personal Privacy (PP)

8/2009 - 2 km. N of Warm Springs, Colorado, United States. 36.36.12019

Image courtesy of the U.S. Geological Survey
© 2004 Microsoft Corporation. Terms of Use Privacy Statement

The Confederated Tribes of the Warm Springs Reservation
Upper Dry Creek Area
Sample Sites - 3/25/05

Ex. 6 Personal Privacy (PP)

Image courtesy of the U.S. Geological Survey
© 2004 Microsoft Corporation. Terms of Use: Privacy Statement
The Confederated Tribes of the Warm Springs Reservation
Sunnyside Area
Sample Sites - 3/25/05

Ex. 6 Personal Privacy (PP)

24383 138 km SE of Portland, Oregon, United States 26 Jul 2000

Ex. 6 Personal Privacy (PP)

0 200m

0 200yd

Image courtesy of the U.S. Geological Survey
© 2004 Microsoft Corporation.

The Confederated Tribes of the Warm Springs Reservation
Kahneeta Area
Sample Sites - 3/25/05

7.0 WATER SYSTEM DESCRIPTION

System Name	Warm Springs
System Classification	Community Water System (CWS).
PWS ID #	104101247
Source Type	The Warm Springs CWS is supplied by surface water from the Deschutes River in Jefferson County, approximately 2.5 miles downstream from Highway 26 crossing. The river water is treated with conventional filtration in a WTP that is designed for a maximum production of 4.3 MGD.
Population Served	Warm Springs CWS serves approximately 3800 persons.
Service Connection	The Warm Springs Tribe CWS has approximately 1356 residential and numerous tribal facility connections, including the Kah-Nee-Tah Resort and Casino, which closed in 2018.
Daily Production	Typical production at Warm Springs Tribe water treatment plant (WTP) is approximately 1.83 MGD.
Treatment – Disinfection	Turbidity reduction is accomplished by adding aluminum Chlorohydrate (ACH) as a coagulant. Flocculation, sedimentation and gravity filters clarify the water. Water is disinfected with chlorine gas supplied from 150-pound cylinders.
Storage – Reservoirs	The Warm Springs CWS has seven reservoirs at strategic locations throughout the system with a combined capacity of 6.335 million gallons. There is an additional WST at the Kah-Nee-Tah Resort that serves the facility and is not owned by the Utility.
Special Note – Fluoridation	Warm Springs Indian Reservation does not currently add fluoride to the drinking water. This WQMP has a sampling plan included in the event the Tribe decides to implement fluoridation.
Flow through the system	Treated surface water is pumped from the Dry Creek Treatment Plant directly to the nearby Tee-Wees Reservoir (1.5 million gallons) at the highest storage point in the system. Water then flows through a series of pressure relief and altitude valves to the distribution system and other reservoirs.
Piping System	Information about the construction materials, sizes, and locations of the distribution system piping is available on the system prints, and/or the O&M Manual.
System Control	The operator should refer to the Warm Springs Water System O&M Manual, drawings, and system documentation for instructions on distributing flow throughout the various segments of the system. The system is monitored at the WTP through a SCADA system.

8.0 CONTACTS - PHONE AND ADDRESSES

IHS Spokane District Office

Ladd Folster, Tribal Utility Consultant
Indian Health Service
528 E. Spokane Falls Blvd. #302
Spokane, WA 99202
(509) 455-3522
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EPA Region 10 - Seattle

Jenna Manheimer
Tribal Drinking Water Coordinator
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Laboratory Samples

****Ask the laboratory to copy EPA on reports****
Email sample results to R10TribalDW@epa.gov -OR-
Fax samples to: (206) 553-1280

Water Systems Operators

Steve Courtney Sr.
Chico Holliday
Confederated Tribes of Warm Springs
P.O. Box 1196 – Utility Dept
Warm Springs, OR 97731
541-553-3246 Utilities
541-553-1472 Water treatment plant
541-460-2727 Chico's cell
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Public Works

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General Manager, Branch of Public Works
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